

light transmission means is provided with a coat of magnetic material or is located within a close-fitting magnetic tube.

- 5 31. A scanning apparatus comprising:
 - an X drive for driving a light transmission means
 - an X drive for driving a light transmission means
 - having an exit tip in an X direction;
 - a Y drive for driving a light transmission means
 - 10 having an exit tip in a Y direction;
 - an X drive input signal generator for providing
 - an X drive input signal; and
 - a Y drive input signal generator for providing a
 - Y drive input signal modulated by a modulating signal
 - 15 derived from said X drive input signal;
 - wherein said exit tip executes a scan pattern
 - when driven simultaneously by said X drive and said Y
 - drive.
- 20 32. A scanning apparatus comprising:
 - an X drive for driving a light transmission means
 - having an exit tip in an X direction;
 - a Y drive for driving a light transmission means
 - having an exit tip in a Y direction;
 - 25 an X drive input signal generator for providing a
 - square wave X drive input signal; and
 - a Y drive input signal generator for providing a
 - Y drive input signal by generating a sawtooth signal and
 - modulating said sawtooth signal with a modulating signal
 - 30 derived from said X drive input signal;
 - wherein said exit tip executes a scan pattern
 - when driven simultaneously by said X drive and said Y
 - drive.
- 35 33. An apparatus as claimed in claim 31, wherein said
- scan pattern is elliptical and has an eccentricity that is
- always greater than zero.